

ELECTROPNEUMATIC PRESSURE REGULATORS



aerospace
 climate control
 electromechanical
 filtration
 fluid & gas handling
 hydraulics
 pneumatics
 process control
 sealing & shielding

| | |
|-------------------------|------------------|
| Basic | 1/4" 1/2" |
| Comfort | 1/4" 1/2" |
| Comfort | 1/2" HP 1" 2" |
| Comfort ATEX | 1/2" 1" 2" |



ELECTROPNEUMATIC PRESSURE REGULATORS

Lucifer® EPP4 Programmable Pressure Regulator

EPP4 is an electro pneumatic pressure regulator with integrated electronic system.

A pulsed width modulated solenoid valve controls the output pressure proportionally to an analog input signal.

Very high accuracy is guaranteed thanks to a high precision closed loop signal provided by a built in pressure sensor.



Market

- Robotics
- Paper industry
- Machine tools
- Mobile
- Buildings
- Textile
- Instrumentation
- Semi conductor



Description of Applications

- Welding
- Speed and brake control
- Sanding
- Cutting
- Humidification
- Tension regulation
- Painting
- Presses
- Polishing
- Adaptative suspension control



Value Propositions for the Lucifer® EPP4 Range of Proportional Pressure Regulators

- All parameters fully adjustable through the PC software Calys
- Easy to use software
- Long life expectancy
- Compact and light
- Limited inventory
- Low power
- Flexible remote display positioning
- Proven expertise of Parker, a pioneer in pressure regulation technology



calys Software for EPP Comfort

Calys is a unique software in house developed to configurate all the parameters of the EPP4 Comfort range.

Calys is an option of the EPP4. To use CALYS, you need to order cable reference 496449 wich permits the communication between the EPP4 and a PC.

Calys offers many capabilities:

- It enables distributors to reduce inventory by keeping a generic EPP4 in stock and adjust it to the needs of each customer application. They can switch for example from 0-10 V to 4-20 mA, or from 0-7 bar pressure range to 0-5 bar.
- Engineers designing a pneumatic system are able to monitor precisely all the important values (electrical or pneumatical) directly on their laptop.
- After sales technicians are able to receive via email all the parameters measured by the EPP4 installed on a machine wherever its location allowing remote ma intenance operation.
- PID regulation parameters can be adjusted with Calys to match required regulator response (like slow or reactive).



To download free Calys software click on www.parker.com/FCDE/Support

ELECTROPNEUMATIC PRESSURE REGULATORS



TABLE OF CONTENT

Introduction EPPpage 412

EPP4 Basic Rangepage 414

EPP4 Comfort Rangepage 418

EPP4 Comfort HP Rangepage 422

EPP4 Comfort Range ATEXpage 428

Accessoriespage 434



INTRODUCTION

Description Operation

The EPP4 Series is a family of electrically remote-controlled pneumatic pressure regulators with closed loop integrated electronic control.

It allows regulating the outlet pressure proportionally to an electrical control signal.

The EPP4 regulator comprises a traditional servo-operated pneumatic pressure regulator, where the pilot chamber is fed by one or the other of two pulse width modulated 2-way solenoid valves.

The pressure sensor measures the outlet pressure of the regulator and provides a feedback signal to the controller.

Any difference between the control signal and the feedback signal is converted to a digital signal to energise the coil of one or the other 2-way valves to correct the position of the regulator.

The control signal can be a voltage (0-10 V) or a current (4-20 mA). The inlet of the "Filling Valve" is connected directly to the main inlet P of the

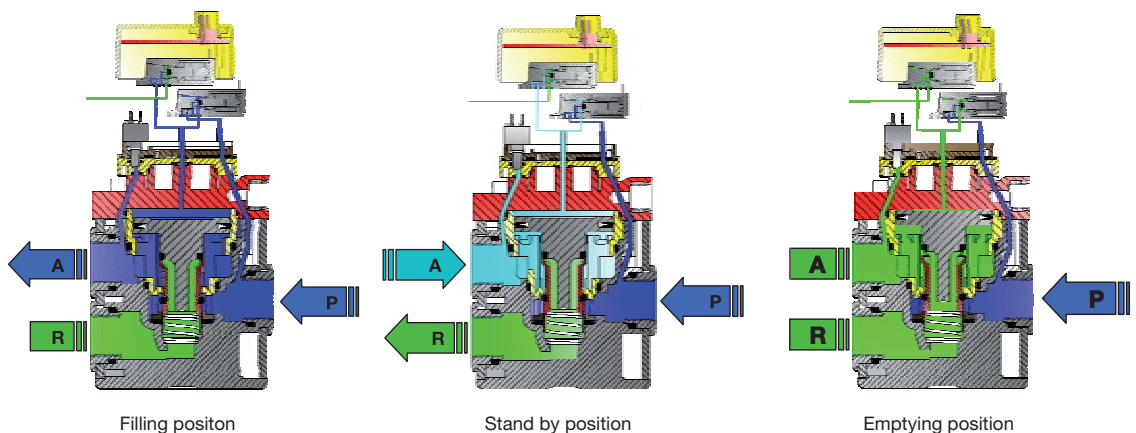
regulator; when energised this valve will fill the servo-chamber for increasing the pressure at the outlet A of the regulator.

When the other "exhaust valve" is energised (reduction of pressure at the outlet A of the regulator), the pressure of the servo-chamber will be exhausted through a discharge orifice located between the cover and the body and directly fed to the atmosphere without silencer.

The exhaust of the main regulated pressure will be made through the quick exhaust R.

The use of a conventional silencer is recommended. Both solenoid valves assure the Filling or Emptying of the servo-chamber in order to increase or decrease the pressure at the outlet of the regulator.

In rest position of the valves all ports are blocked.



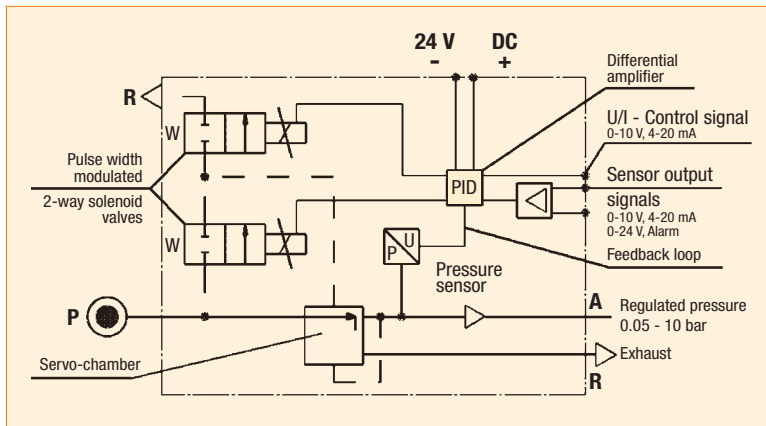
Block Diagram

The controller receives both the control signal (set pressure) and the feedback signal from the sensor (outlet pressure).

Any difference between the two amplifier inputs results in a corresponding output which drives the appropriate 2-way pulse width modulated solenoid valve so that the pilot piston moves to correct the pressure.

The same feedback signal from the sensor is used for the output feedback in voltage and current.

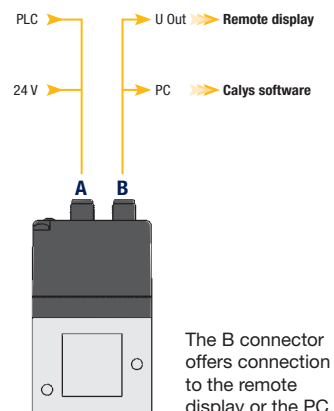
The digital signal (alarm) is activated when the conditions (out of pressure or time tolerance) are met.



EPP4 possible executions : Basic and Comfort

EPP4 Basic and Comfort ranges share the same reliable mechanical parts. Proportional regulation is also identical for the two different executions, giving the same characteristics for hysteresis or precision for instance.

Comfort range regulators have a second M12 connector, that can be used to connect a remote display showing the current regulated pressure, or a PC to easily set the regulation's parameters. These are the key feature options for a comfortable use.



LUCIFER® EPP4 BASIC 1/4" & 1/2"

| | |
|-------------------------|------------------|
| Basic | 1/4" 1/2" |
| Comfort | 1/4" 1/2" |
| Comfort | 1/2" HP 1" 2" |
| Comfort ATEX | 1/2" 1" 2" |

TECHNICAL DATA

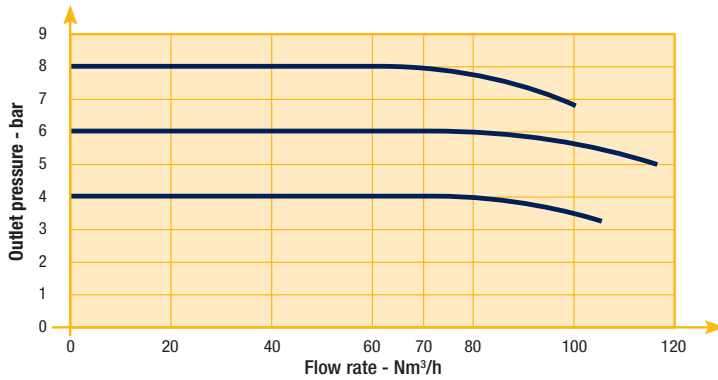
| | Basic 1/4" | Basic 1/2" |
|--|--|-----------------------|
| Fluids: | Lubricated or non lubricated air and neutral gases Recommended filtration: 50 µm | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 12 bar | 1 to 12 bar |
| Outlet pressure range: | 0.05 to 10 bar | |
| Hysteresis: | ± 50 mbar (factory set up) | |
| Air consumption at constant control signal: | 0 | |
| Supply voltage: | 24 V DC ± 15% (Max. ripple 1 V) | |
| Power consumption: | Max. 2.8 W with 24 V DC and constant changes of the control signal < 1.5 W without change of control signal | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | |
| Max. flow: Indicative response time: With a volume of 330 cm ³ at the outlet of the regulator | 70 m ³ /h | 150 m ³ /h |
| Filling 2 to 4 bar: | 50 msec | 60 msec |
| Filling 2 to 8 bar: | 100 msec | 120 msec |
| Emptying 4 to 2 bar: | 70 msec | 90 msec |
| Emptying 8 to 2 bar: | 130 msec | 190 msec |
| Safety position: | In case of control signal failure or if it is less than 50mV, the regulated pressure drops automatically to 0 bar (atmospheric pressure). In case of voltage supply failure, the regulated pressure will be kept constant. | |
| Electrical connection: | M12 - 4 pin; 4 x 0.34 mm ² | |
| Life expectancy: | > 50 Million changes of control signal steps | |
| Mounting position: | Indifferent (recommended position: upright; electronic part on top) | |
| Resistance to vibrations: | 30 g in all directions | |
| Degree of protection: | IP 65 | |
| Assembly: | Silicone free | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 EN 61000-6-4: 2001 | |
| Installation and setting instructions: | See our "Notice 408038, 408014" and appendix supplied with the product. | |

Note: Parker reserves the right to change specifications without notification.

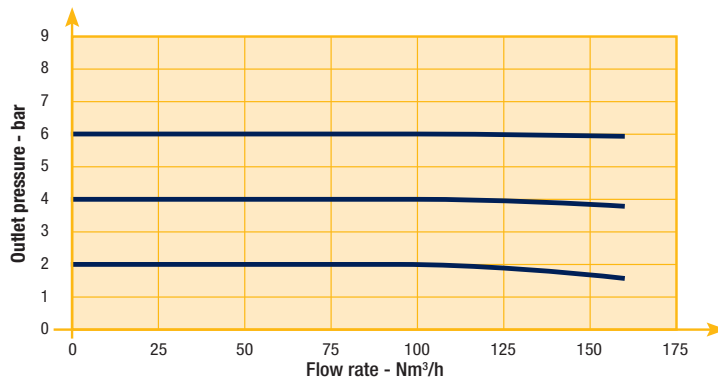
LUCIFER® EPP4 BASIC 1/4" & 1/2"

FLOW CURVES

Flow Curve Basic 1/4"



Flow Curve Basic 1/2"



LUCIFER® EPP4 BASIC 1/4" & 1/2"

REFERENCES

| Codes | Pipe | Pressure Range (bar) | | Control Signal (see options) | Drawing Number |
|------------------|----------|----------------------|--------|------------------------------|----------------|
| P4BG2001A001 | G 1/4" | 0 | 4 bar | 4 - 20 mA | 1 |
| P4BG2001A002 | G 1/4" | 0 | 10 bar | 0 - 10 V | 1 |
| P4BG2001A003 | G 1/4" | 0 | 10 bar | 4 - 20 mA | 1 |
| P4BG2001A004 | G 1/4" | 0 | 6 bar | 0 - 10 V | 1 |
| P4BG2001A005 | G 1/4" | 0 | 6 bar | 4 - 20 mA | 1 |
| P4BG2001A006 | G 1/4" | 0 | 5 bar | 0 - 10 V | 1 |
| P4BG2001A007 | G 1/4" | 0 | 5 bar | 4 - 20 mA | 1 |
| P4BG2001A008 | G 1/4" | 0 | 7 bar | 0 - 10 V | 1 |
| P4BG2001A009 | G 1/4" | 0 | 7 bar | 4 - 20 mA | 1 |
| P4BG2003A002 * | G 1/4" | 0 | 10 bar | 0 - 10 V | 1 |
| P4BG2003A003 * | G 1/4" | 0 | 10 bar | 4 - 20 mA | 1 |
| P4BG4001A002 | G 1/2" | 0 | 10 bar | 0 - 10 V | 2 |
| P4BG4001A003 | G 1/2" | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BG4001A004 | G 1/2" | 0 | 6 bar | 0 - 10 V | 2 |
| P4BG4001A005 | G 1/2" | 0 | 6 bar | 4 - 20 mA | 2 |
| P4BG4001A006 | G 1/2" | 0 | 5 bar | 0 - 10 V | 2 |
| P4BG4001A007 | G 1/2" | 0 | 5 bar | 4 - 20 mA | 2 |
| P4BG4001A008 | G 1/2" | 0 | 7 bar | 0 - 10 V | 2 |
| P4BG4001A009 | G 1/2" | 0 | 7 bar | 4 - 20 mA | 2 |
| P4BG4004A010 *** | G 1/2" | 0 | 4 bar | 0 - 10 V | 2 |
| P4BG4051A002 ** | G 1/2" | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BN2001A002 | NPT 1/4" | 0 | 10 bar | 0 - 10 V | 2 |
| P4BN2001A003 | NPT 1/4" | 0 | 10 bar | 4 - 20 mA | 2 |
| P4BN4001A002 | NPT 1/2" | 0 | 10 bar | 0 - 10 V | 2 |
| P4BN4001A003 | NPT 1/2" | 0 | 10 bar | 4 - 20 mA | 2 |

* Integrated pilot exhaust

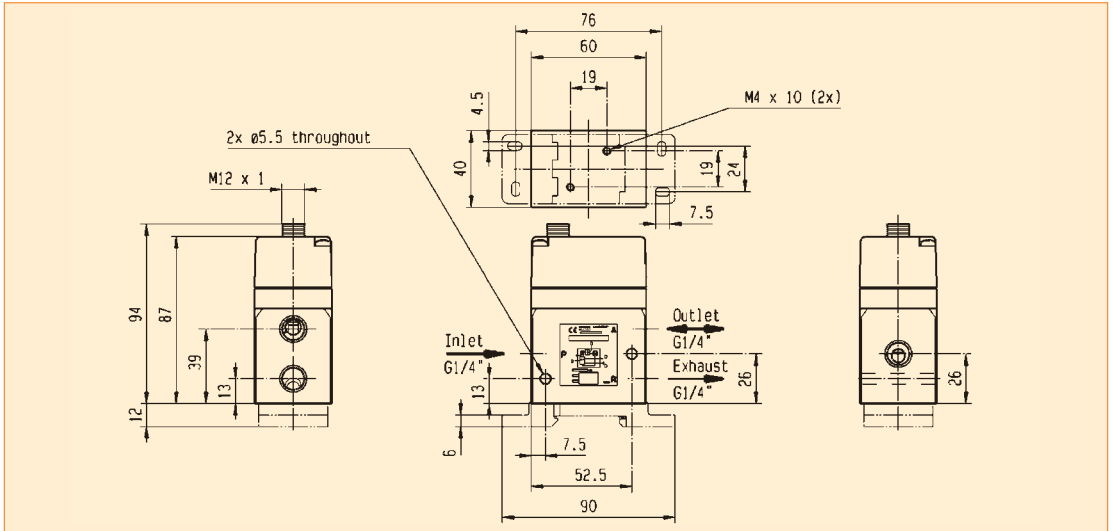
** O2

*** External pressure supply



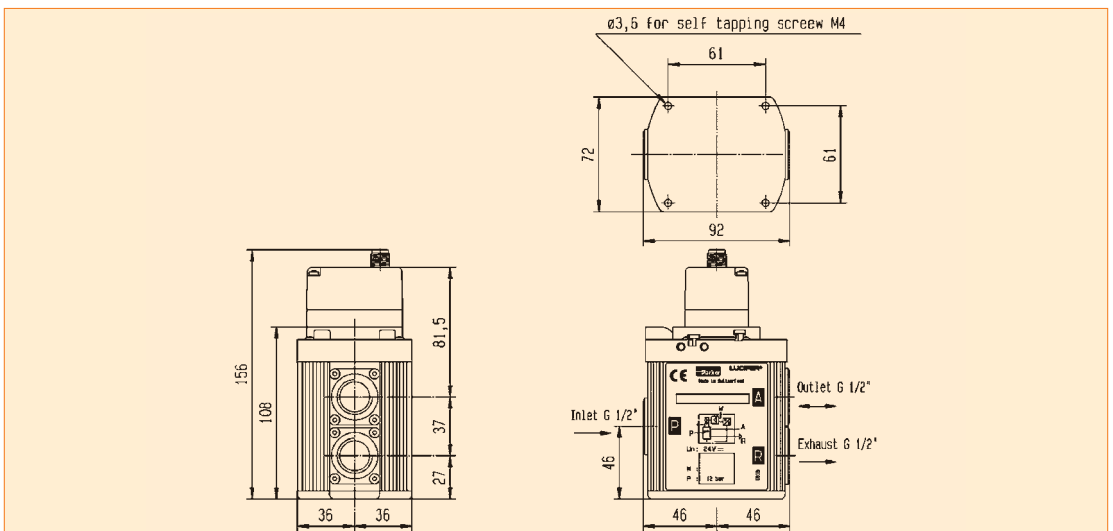
LUCIFER® EPP4 BASIC 1/4" & 1/2"

DIMENSIONS DRAWINGS EPP4 BASIC 1/4"



Drawing 1

DIMENSIONS DRAWINGS EPP4 BASIC 1/2"



Drawing 2

LUCIFER® EPP4 COMFORT 1/4" & 1/2"

| | |
|--------------|------------------|
| Basic | 1/4" 1/2" |
| Comfort | 1/4" 1/2" |
| Comfort | 1/2" HP 1" 2" |
| Comfort ATEX | 1/2" 1" 2" |

TECHNICAL DATA

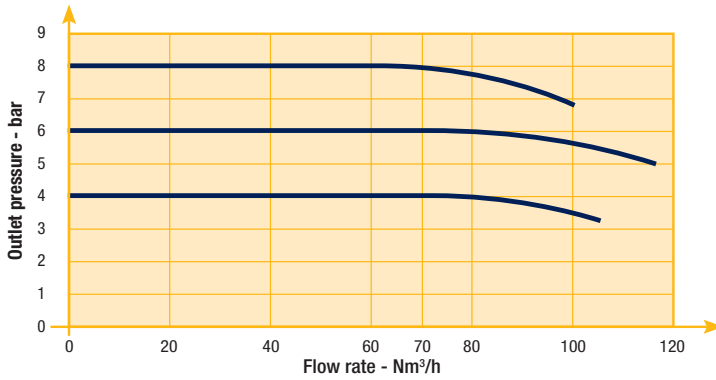
| | Comfort 1/4" | Comfort 1/2" |
|--|--|--|
| Fluids: | Lubricated or non lubricated air and neutral gases - Recommended fil tration: 50 µm | |
| Temperature range: | Ambient: 0°C to +50 °C Fluid: 0°C to +50 °C | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 12 bar | 1 to 12 bar |
| Outlet pressure range: | 0.05 bis 10 bar | |
| Hysteresis: | ± 50 mbar (factory set up) | |
| Air consumption at constant control signal: | 0 | |
| Supply voltage: | 24 V DC ± 15 % (Max. ripple 1 V) | |
| Power consumption: | Max. 2.8 W with 24 V DC and constant changes of the control signal < 1.5 W without change of control signal | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable | Digital 0/24 V for alarm features: Adjustable pressure error (+/-) Adjustable delay ON Adjustable delay OFF Adjustable logic (+/-) |
| Max. flow: | 70 m³/h | 150 m³/h |
| Indicative response time: | With a volume of 330 cm³ at the outlet of the regulator | |
| Filling 2 to 4 bar : | 50 msec | 60 msec |
| Filling 2 to 8 bar: | 100 msec | 120 msec |
| Emptying 4 to 2 bar: | 70 msec | 90 msec |
| Emptying 8 to 2 bar: | 130 msec | 190 msec |
| Safety position: | In case of control signal failure or if it is less than 50 mV, the regulated pressure drops automatically to 0 bar (atmospheric pressure). In case of voltage supply failure, the regulated pressure will be kept constant. | |
| Electrical connection: | M12 - 8 pin; male connector power supply/control signal M12 - 5 pin; male connector communication | |
| Life expectancy: | > 50 Million changes of control signal steps | |
| Mounting position: | Indifferent (recommended position: upright; electronic part on top) | |
| Resistance to vibrations: | 30 g in all directions | |
| Degree of protection: | IP 65 | |
| Assembly: | Silicone free | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | |
| Installation and setting instructions: | See our "Notice 408128, 408134" and appendix supplied with the product. | |

Note: Parker reserves the right to change specifications without notification.

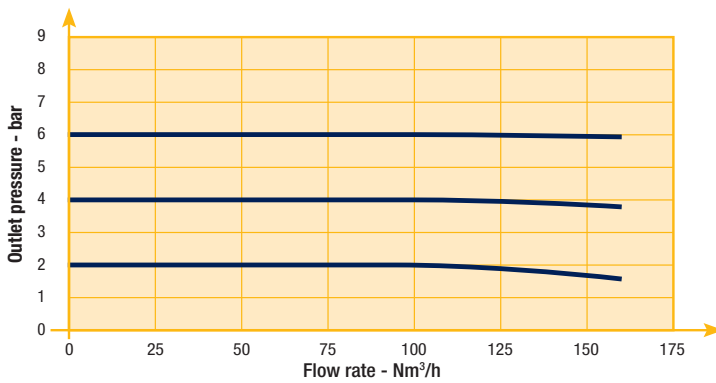
LUCIFER® EPP4 COMFORT 1/4" & 1/2"

Flow Curves

Flow Curve 1/4"



Flow Curve 1/2"



LUCIFER® EPP4 COMFORT 1/4" & 1/2"

REFERENCES

| Codes | Pipe | Pressure Range (bar) | | Control Signal (see options) | Display | Drawing Number |
|-----------------|---------|----------------------|----|------------------------------|----------|----------------|
| P4CG2001C001 | G 1/4 | 0 | 10 | 0-10 V | - | 3 |
| P4CG2001C002 | G 1/4 | 0 | 10 | 4-20 mA | - | 3 |
| P4CG2001C005 | G 1/4 | 0 | 7 | 0-10 V | - | 3 |
| P4CG2001C006 | G 1/4 | 0 | 7 | 4-20 mA | - | 3 |
| P4CG2002C001 | G 1/4 | 0 | 10 | 0-10 V | included | 3 |
| P4CG2002C002 | G 1/4 | 0 | 10 | 4-20 mA | included | 3 |
| P4CG2003C001 * | G 1/4 | 0 | 10 | 0-10 V | - | 3 |
| P4CG2003C002 * | G 1/4 | 0 | 10 | 4-20 mA | - | 3 |
| P4CG2002C007 | G 1/4 | 0 | 7 | 0-10 V | - | 3 |
| P4CG2002C008 | G 1/4 | 0 | 7 | 4-20 mA | - | 3 |
| P4CN2001C001 | 1/4 NPT | 0 | 10 | 0-10 V | - | 3 |
| P4CN2001C002 | 1/4 NPT | 0 | 10 | 4-20 mA | - | 3 |
| P4CN2002C001 | 1/4 NPT | 0 | 10 | 0-10 V | included | 3 |
| P4CN2002C002 | 1/4 NPT | 0 | 10 | 4-20 mA | included | 3 |
| | | | | | | |
| P4CG4001C001 | G 1/2 | 0 | 10 | 0-10 V | - | 4 |
| P4CG4001C002 | G 1/2 | 0 | 10 | 4-20 mA | - | 4 |
| P4CG4001C005 | G 1/2 | 0 | 7 | 0-10 V | - | 4 |
| P4CG4001C006 | G 1/2 | 0 | 7 | 4-20 mA | - | 4 |
| P4CG4002C001 | G 1/2 | 0 | 10 | 0-10 V | included | 4 |
| P4CG4002C002 | G 1/2 | 0 | 10 | 4-20 mA | included | 4 |
| P4CG4002C005 | G 1/2 | 0 | 7 | 0-10 V | - | 4 |
| P4CG4002C006 | G 1/2 | 0 | 7 | 4-20 mA | - | 4 |
| P4CG4051C001 ** | G 1/2 | 0 | 10 | 0-10 V | - | 4 |
| P4CG4051C002 ** | G 1/2 | 0 | 10 | 4-20 mA | - | 4 |
| P4CN4001C001 | 1/2 NPT | 0 | 10 | 0-10 V | - | 4 |
| P4CN4001C002 | 1/2 NPT | 0 | 10 | 4-20 mA | - | 4 |
| P4CN4002C001 | 1/2 NPT | 0 | 10 | 0-10 V | included | 4 |
| P4CN4002C002 | 1/2 NPT | 0 | 10 | 4-20 mA | included | 4 |

* Integrated pilot exhaust

** O2



LUCIFER® EPP4 COMFORT 1/2"HP, 1" & 2"

| | |
|----------------|--------------------------|
| Basic | 1/4" 1/2" |
| Comfort | 1/4" 1/2" |
| Comfort | 1/2" HP 1" 2" |
| Comfort ATEX | 1/2" 1" 2" |

TECHNICAL DATA

| | Comfort 1/2" HP | Comfort 1" | Comfort 2" |
|--|---|--|----------------|
| Fluids: | Lubricated or non lubricated air and neutral gases - Recommended filtration: 50 µm | | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | 1 to 21 bar | 1 to 21 bar | 1 to 12 bar |
| Outlet pressure range: | 0.05 to 20 bar | 0.05 to 20 bar | 0.05 to 10 bar |
| Hysteresis: | ≤ 100 mbar if P inlet ≤ 10 bar ≤ 200 mbar if P inlet > 10 bar | | |
| Air consumption at constant control signal: | 0 | | |
| Supply voltage: | 24V DC ± 15% | | |
| Power consumption: | Max. 6 W with 24 V DC and constant changes of the control signal < 2 W without change of control signal | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable | Digital 0/24 V for alarm features: Adjustable pressure error (+/-) Adjustable delay ON Adjustable delay OFF Adjustable logic (+/-) | |
| | Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable | | |
| Max. flow: | 150 m³/h | 1 000 m³/h | 2 700 m³/h |
| Indicative response time: | With a volume of 330 cm³ at the outlet of the regulator | | |
| Filling 2 to 8 bar: | 120 msec | 250 msec | 250 msec |
| Emptying 8 to 2 bar: | 190 msec | 400 msec | 400 msec |
| Safety position: | In case of control signal failure or if it is less than 50 mV, the regulated pressure drops automatically to 0 bar atmospheric pressure (for pressure ranges from 0-10 bar, 100 mV for pressure range over 10 bar). In case of voltage supply failure, the regulated pressure will be kept constant. | | |
| Electrical connection: | M12 - 8 pin; male connector power supply/control signal M12 - 5 pin; male connector communication | | |
| Life expectancy: | > 20 Million changes of control signal steps | | |
| Mounting position: | Indifferent (recommended position: upright; electronic part on top) | | |
| Resistance to vibrations: | 30 g in all directions | | |
| Degree of protection: | IP 65 | | |
| Assembly: | Silicone free | | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | | |
| Installation and setting instructions: | See our "408 193" and appendix supplied with the product. | | |

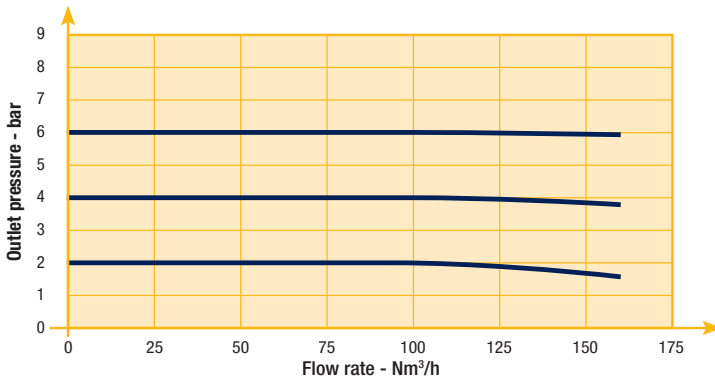
Note: Parker reserves the right to change specifications without notification.

LUCIFER® EPP4 COMFORT 1/2"HP, 1" & 2"

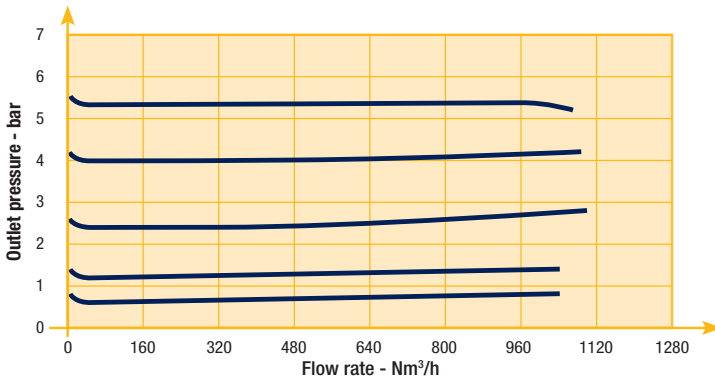
FLOW CURVES



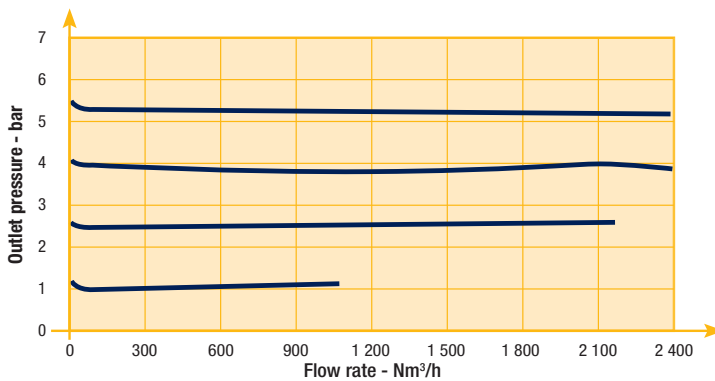
Flow Curve 1/2"HP



Flow Curve 1"



Flow Curve 2"



LUCIFER® EPP4 COMFORT 1/2"HP

REFERENCES

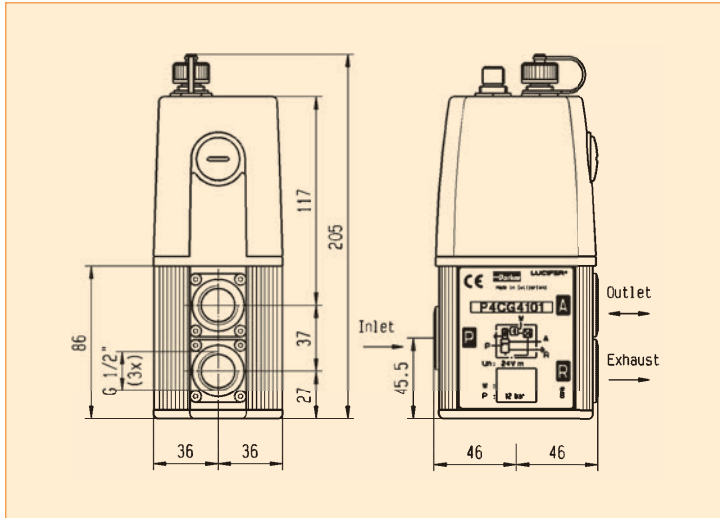
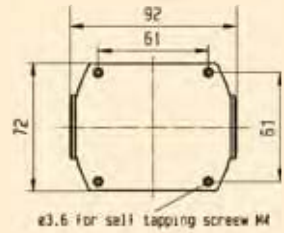
| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|--------------|------|--------------------------|----------------------|----|------------------------------|---------------------|
| P4CG4101D001 | G1/2 | 15 | 0 | 12 | 0-10 V | 5 |
| P4CG4201D005 | G1/2 | 21 | 0 | 16 | 0-10 V | 6 |
| P4CG4201D003 | G1/2 | 21 | 0 | 20 | 0-10 V | 6 |
| P4CG4201D004 | G1/2 | 21 | 0 | 20 | 4-20 mA | 6 |

Other specific settings or specialties are available, please contact us.

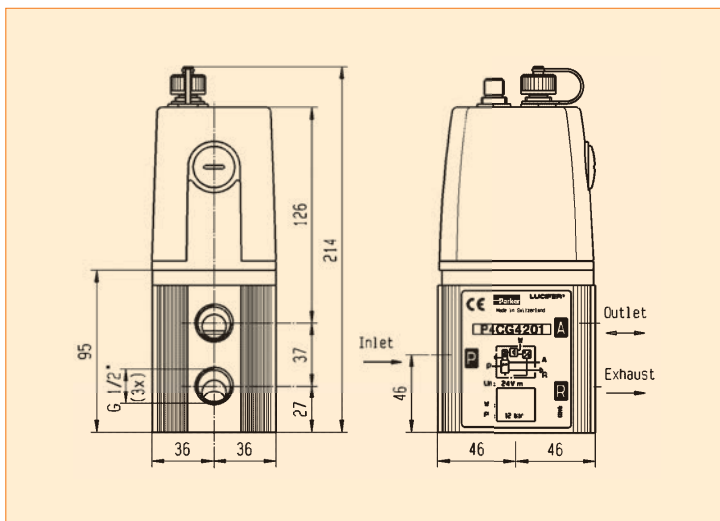
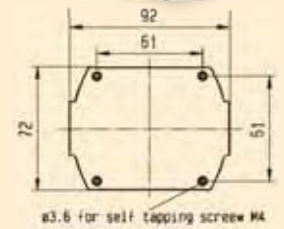


LUCIFER® EPP4 COMFORT 1/2"HP

DIMENSIONS DRAWINGS



Drawing 5



Drawing 6

LUCIFER® EPP4 COMFORT 1" & 2"

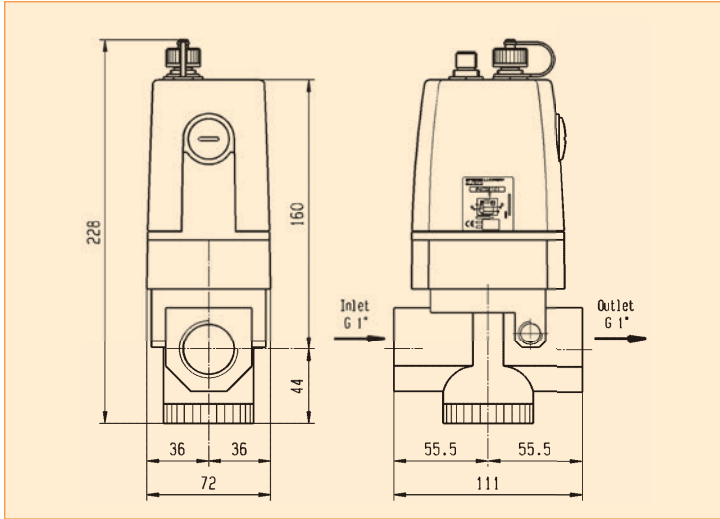
REFERENCES

| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|--------------|------|--------------------------|----------------------|-----|------------------------------|---------------------|
| P4CG6101C009 | G1 | 12 | 0 | 3.5 | 4-20 mA | 7 |
| P4CG6101C011 | G1 | 12 | 0 | 5.0 | 0-10 V | 7 |
| P4CG6101C010 | G1 | 12 | 0 | 6.0 | 4-20 mA | 7 |
| P4CG6101C001 | G1 | 12 | 0 | 10 | 0-10 V | 7 |
| P4CG6101C002 | G1 | 12 | 0 | 10 | 4-20 mA | 7 |
| P4CG6201D001 | G1 | 21 | 0 | 12 | 0-10 V | 7 |
| P4CG6201D003 | G1 | 21 | 0 | 20 | 0-10 V | 7 |
| P4CG9101C012 | G2 | 12 | 0 | 4.0 | 4-20 mA | 8 |
| P4CG9101C010 | G2 | 12 | 0 | 6.0 | 4-20 mA | 8 |
| P4CG9101C001 | G2 | 12 | 0 | 10 | 0-10 V | 8 |
| P4CG9101C002 | G2 | 12 | 0 | 10 | 4-20 mA | 8 |

Other specific settings or specialties are available, please contact us.

LUCIFER® EPP4 COMFORT 1" & 2"

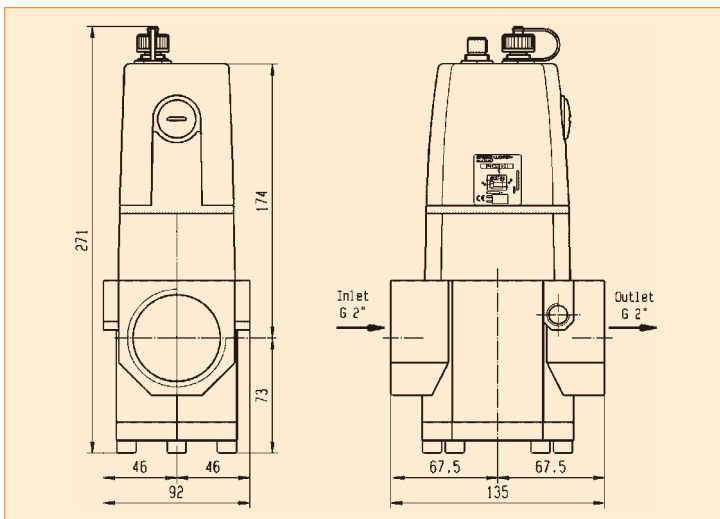
DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1"



Drawing 7



DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 2"



Drawing 8



LUCIFER® EPP4 COMFORT 1/2", 1" & 2" ATEX



| | |
|-----------------|------------------|
| Basic | 1/4" 1/2" |
| Comfort | 1/4" 1/2" |
| Comfort | 1/2" HP 1" 2" |
| Comfort ATEX | 1/2" 1" 2" |

TECHNICAL DATA

| | Comfort 1/2" ATEX | Comfort 1" ATEX | Comfort 2" ATEX |
|--|---|--|--------------------|
| Fluids: | Lubricated or non lubricated air and neutral gases - Recommended filtration: 50 µm | | |
| Temperature range: | Ambient: 0°C to +50°C Fluid: 0°C to +50°C | | |
| Inlet pressure range: The inlet pressure must always be at least 1 bar above the regulated pressure. | Inlet pressure range: 1 to 12 bar | | |
| Outlet pressure range: | Outlet pressure range: 0.05 to 10 bar | | |
| Hysteresis: | ≤ 100 mbar | | |
| Air consumption at constant control signal: | 0 | | |
| ATEX certification: | Ex II 3 G/D Ex nA IIC T4 Gc Ex tc IIIB T130°C Dc | | |
| Supply voltage: | 24V DC ± 15 % | | |
| Power consumption: | Max. 6 W with 24 V DC and constant changes of the control signal < 2 W without change of control signal | | |
| Control signal: | Analog 0 - 10 V Analog 4 - 20 mA | | |
| Outlet sensor signal: | Analog 0 - 10 V Standard for 0 - 10 bar; Adjustable | Digital 0/24 V for alarm features: Adjustable pressure error (+/-) Adjustable delay ON Adjustable delay OFF Adjustable logic (+/-) | |
| | Analog 4 - 20 mA Standard for 0 - 10 bar; Adjustable | | |
| Max. flow: | 150 m³/h | 1 000 m³/h | 2 700 m³/h |
| Indicative response time: | With a volume of 330 cm³ at the outlet of the regulator | | |
| Filling 2 to 8 bar: | 120 msec | 250 msec | 250 msec |
| Emptying 8 to 2 bar: | 190 msec | 400 msec | 400 msec |
| Safety position: | In case of control signal failure or if it is less than 50 mV, the regulated pressure drops automatically to 0 bar atmospheric pressure (for pressure ranges from 0-10 bar, 100 mV for pressure range over 10 bar). In case of voltage supply failure, the regulated pressure will be kept constant. | | |
| Electrical connection: | M12 - 8 pin; male connector power supply/control signal M12 - 5 pin; male connector communication | | |
| Life expectancy: | > 20 Million changes of control signal steps | | |
| Mounting position: | Indifferent (recommended position: upright; electronic part on top) | | |
| Resistance to vibrations: | 30 g in all directions | | |
| Degree of protection: | IP 54 | | |
| Assembly: | Silicone free | | |
| Electromagnetic compatibility: In accordance with: | EN 61000-6-1: 2001 EN 61000-6-2: 2001 EN 61000-6-3: 2001 + A11 2004 edition (01/07/07) EN 61000-6-4: 2001 | | |
| Installation and setting instructions: | See our "408 283" and appendix supplied with the product. | | |

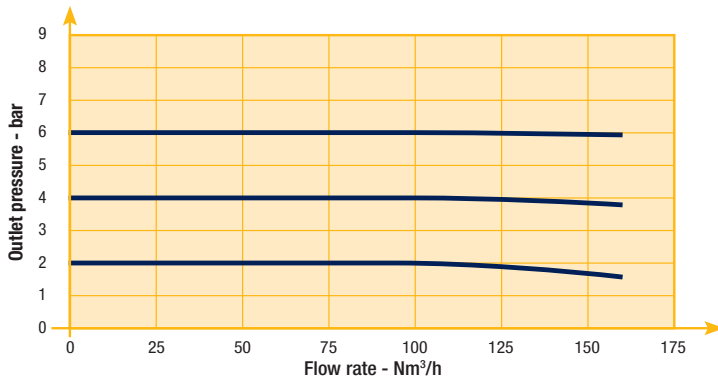
Note: Parker reserves the right to change specifications without notification.

LUCIFER® EPP4 COMFORT 1/2", 1" & 2" ATEX

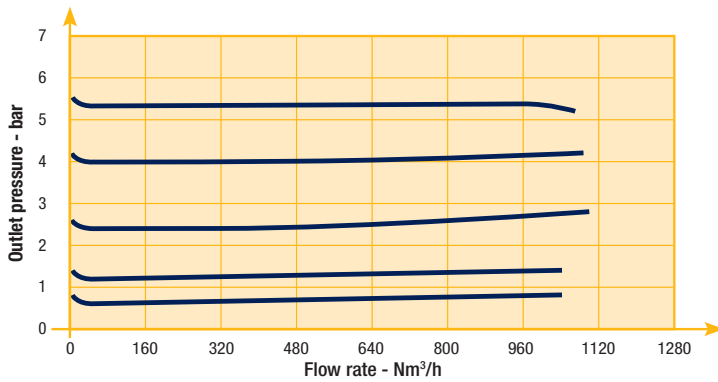


FLOW CURVES

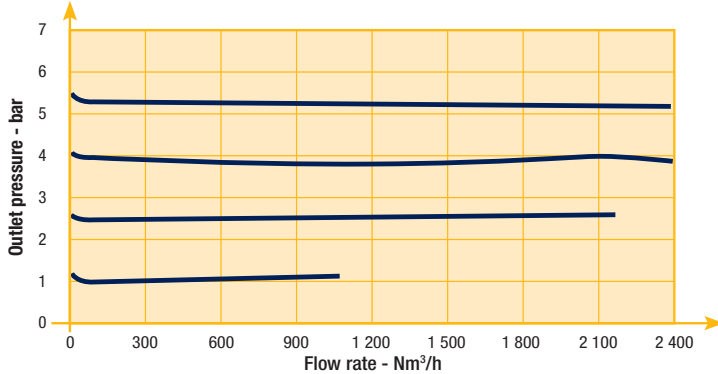
Flow Curve 1/2"



Flow Curve 1"



Flow Curve 2"



LUCIFER® EPP4 COMFORT 1/2" ATEX



REFERENCES

| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|-----------------|------|--------------------------|----------------------|----|------------------------------|---------------------|
| P4CG4461C001 | G1/2 | 12 | 0 | 10 | 0-10 V | 9 |
| P4CG4461C002 | G1/2 | 12 | 0 | 10 | 4-20 mA | 9 |
| P4CG4465C001 ** | G1/2 | 12 | 0 | 10 | 0-10 V | 9 |
| P4CG4465C002 ** | G1/2 | 12 | 0 | 10 | 4-20 mA | 9 |

** O2

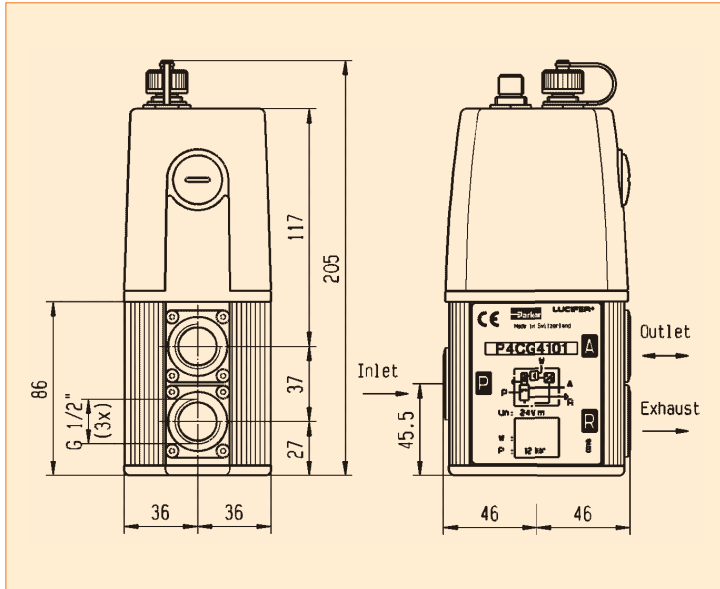
Other specific settings or specialties are available, please contact us.



LUCIFER® EPP4 COMFORT 1/2" ATEX



DIMENSIONS DRAWINGS



Drawing 9

LUCIFER® EPP4 COMFORT 1" & 2" ATEX



REFERENCES

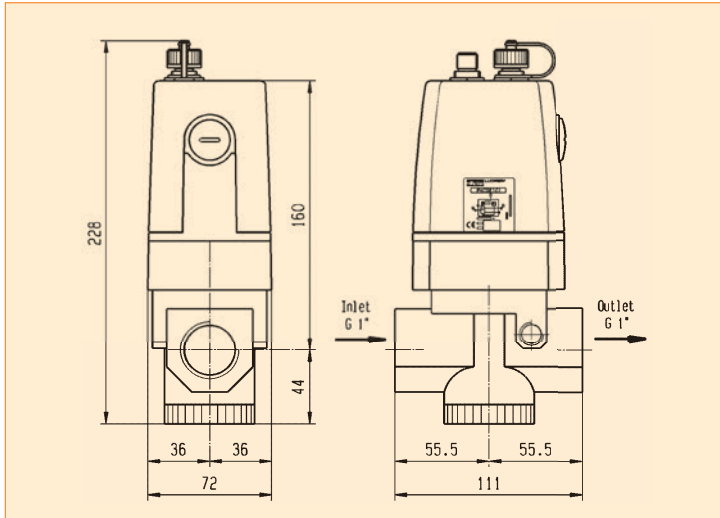
| Codes | Pipe | Max inlet pressure (bar) | Pressure range (bar) | | Control signal (see options) | Dimensional Drawing |
|--------------|------|--------------------------|----------------------|----|------------------------------|---------------------|
| P4CG6161C001 | G1 | 12 | 0 | 10 | 0-10 V | 11 |
| P4CG6161C002 | G1 | 12 | 0 | 10 | 4-20 mA | 11 |
| P4CG9161C001 | G2 | 12 | 0 | 10 | 0-10 V | 12 |
| P4CG9161C002 | G2 | 12 | 0 | 10 | 4-20 mA | 12 |

Other specific settings or specialties are available, please contact us.

LUCIFER® EPP4 COMFORT 1" & 2" ATEX

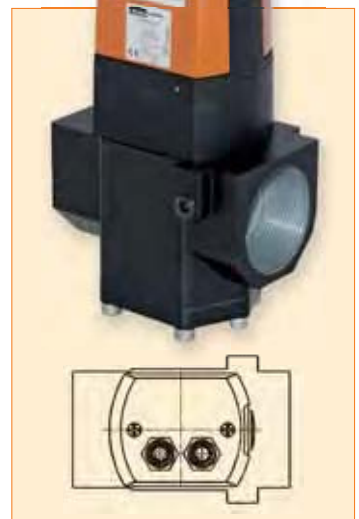
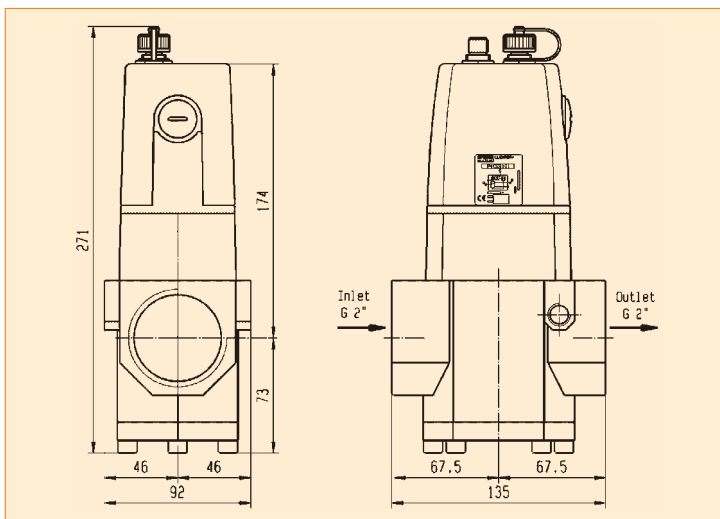


DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 1"



Drawing 11

DIMENSIONS DRAWINGS EPP4 COMFORT RANGE 2"



Drawing 12

LUCIFER® EPP4 ACCESSORIES

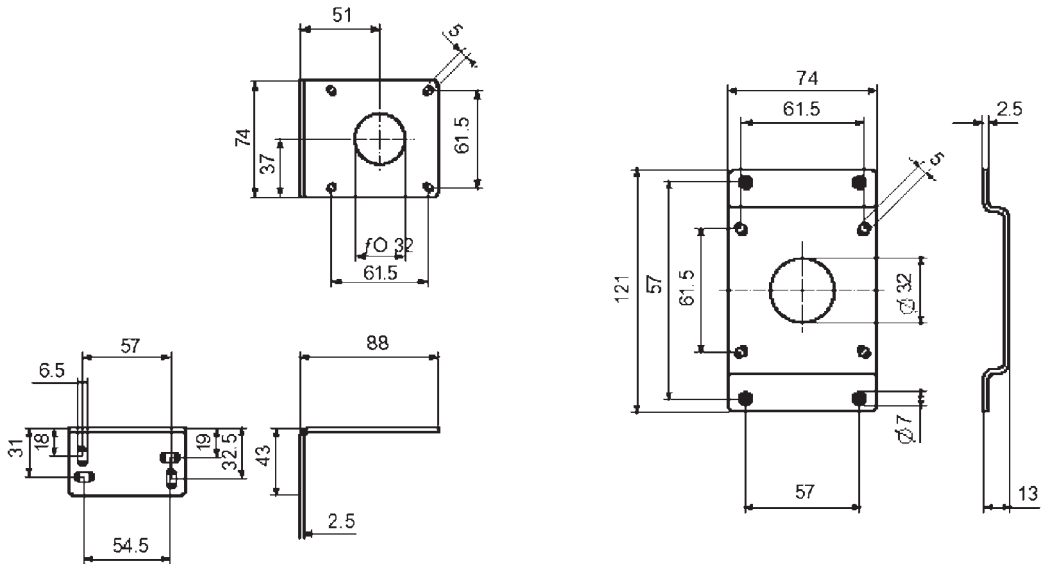
MOUNTING BRACKETS FOR EPP4 1/4" BASIC / COMFORT



This mounting bracket is delivered as a standard with all EPP4 1/4".

LUCIFER® EPP4 ACCESSORIES

MOUNTING BRACKETS FOR EPP4 1/2" BASIC / COMFORT



Order reference 491367



Order reference 491366

LUCIFER® EPP4 ACCESSORIES

POWER SUPPLY/CONTROL SIGNAL CABLE FOR BASIC AND COMFORT VERSIONS.

Cable for Basic EPP4

- 2 m cable with moulded straight M12-4 pole

Order Ref. P8L-MC04A2A-M12



Cable for Comfort EPP4

- 2 m cable with moulded straight M12-8 pole

Order Reference 496796



LUCIFER® EPP4 COMFORT ACCESSORIES

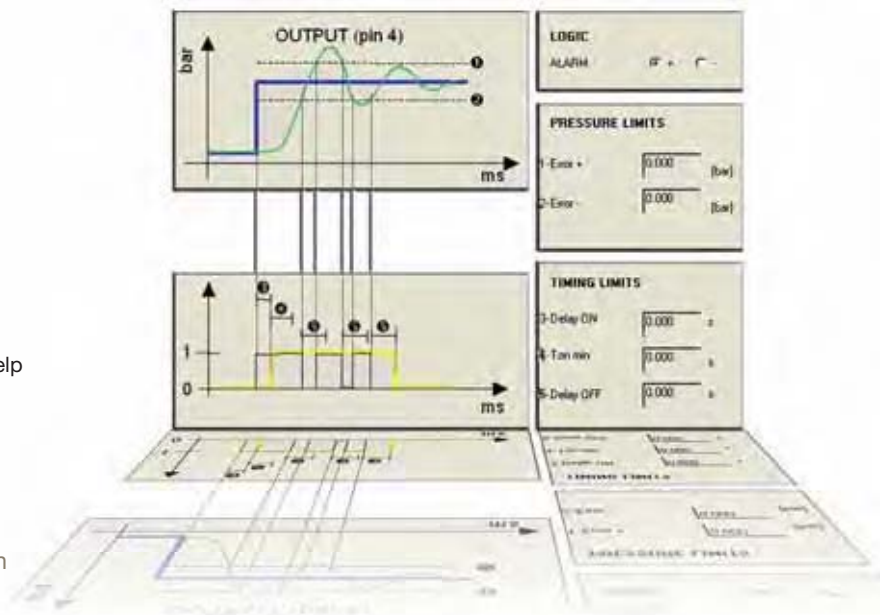
calys SOFTWARE

Calys is a unique software in house developed to configure all the parameters of the EPP4 Comfort range. Calys is an option of the EPP4. A specific cable is needed for the communication between the EPP4 and a PC.



Calys offers many capabilities:

- Live monitoring (control signal, regulated pressure, supply voltage,...)
- Recording of the main parameters (control signal, regulated pressure, supply voltage,...) in an Excel file
- Free calibration for the inputs and outputs
- Adjustable alarm (positive-negative, pressure limits, delays)
- Configuration files easy to duplicate
- Complete and interactive help file
- Data in 4 different pressure units
- Menus in 4 languages (English, German, French and Italian)



Specific communication cable PC-EPP4 with RS232 and USB connection

Order Reference 496449

This option is for safe area only.

To download free Calys software click on www.parker.com/FCDE/Support

LUCIFER® EPP4 COMFORT ACCESSORIES

REMOTE DISPLAY

This option includes the Remote Display and 1.5 meter connecting cable. Connected to the pressure regulator, it offers flexible monitoring. This option only works with EPP4 0-10 bar.

Compact and highly readable remote LED display:

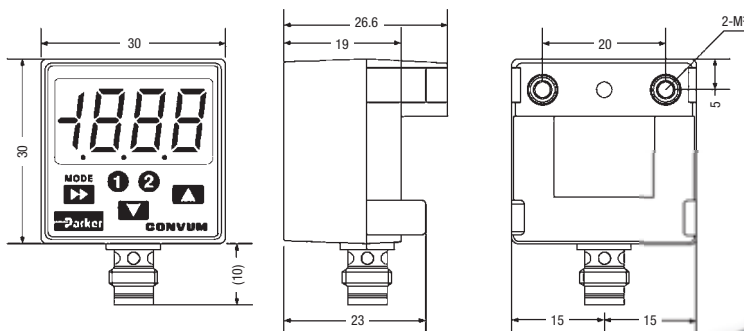
- Bar and PSI scales
- Security lock
- 1.5 m cable
- Mounting brackets



**Order the Remote Display
under reference 496490**

This option is for safe area only.

PANEL MOUNTING KIT



**Order the Panel Mounting
Kit under reference 496601**

COILS, HOUSINGS & ELECTRICAL PARTS

A COMPLETE RANGE OF COILS, HOUSINGS
AND ELECTRICAL PARTS FOR SOLENOID VALVES

